

AMENDMENT TO THE CLAIMS:

Please amend the claims as follows:

CLAIMS US

1. (Currently Amended) ~~Use of nanoparticles comprising:~~ Catalyst consisting of nanoparticles, said nanoparticles comprising:

- a metal core containing at least one platinoid or an alloy of a platinoid,
- a first organic coating formed from molecules attached to the surface of the metal core, and
- a second organic coating formed from molecules different from the molecules of the first organic coating, and which are grafted onto molecules of the first organic coating, as catalysts coating.

2. (Currently Amended) ~~Use according to Claim 1,~~ Catalyst according to Claim 1, in which the metal core of the nanoparticles consists of platinum, a platinum alloy or a mixture of the two.

3. (Currently Amended) ~~Use according to~~ Catalyst according to Claim 1 or Claim 2, in which the molecules of the first organic coating are residues of compounds comprising at least two chemical functions including a first function for attaching them to the surface of the metal core, and a second function for grafting them with the molecules of the second organic coating.

4. (Currently Amended) ~~Use according to~~ Catalyst according to Claim 3, in which the molecules of the second organic coating are residues of compounds comprising at least one chemical function for grafting them to the molecules of the first organic coating.

5. (Currently Amended) ~~Use according to any one of Claims 1 to 4, Catalyst according to Claim 1,~~ in which the molecules of the first organic coating are capable of degrading at the surface of the metal core when they are not grafted with molecules of the second organic coating.

6. (Currently Amended) ~~Use according to Claim 4 or Claim 5, Catalyst according to Claim 5,~~ in which the molecules of the first organic coating are 4-mercaptoaniline residues.

7. (Currently Amended) ~~Use according to any one of the preceding claims, in which, since Catalyst according to Claim 1, in which,~~ the nanoparticles are being made by means of a process comprising a reaction for grafting the compounds intended to form the molecules of the second organic coating onto the molecules of the first organic coating, the proportion of molecules of the first organic coating onto which are grafted the molecules of the second organic coating is less than 100% after this reaction.

8. (Currently Amended) ~~Use according to any one of the preceding claims,~~ Catalyst according to Claim 1, in which the thickness formed by the two organic coatings does not exceed about 10 nm.

9. (Currently Amended) ~~Use according to any one of the preceding claims, in which Catalyst according to Claim 1,~~ in which the molecules of the second organic coating are residues of compounds chosen from thiophenes comprising at least one function for grafting them onto the molecules of the first organic coating, and monocyclic and polycyclic anhydrides.

10. (Currently Amended) ~~Use according to Claim 9,~~ Catalyst according to Claim 9, in which the molecules of the second organic coating are residues of compounds chosen from thiophene acid chloride, glutaric anhydride, sulfobenzoic anhydride, diphenic anhydride, tetrafluorophthalic anhydride, tetraphenylphthalic anhydride and diphenylmaleic anhydride.

11. (Currently Amended) ~~Use according to any one of the preceding claims,~~ Catalyst according to Claim 1, in which the nanoparticles are from about 1.5 to 10 nm in diameter and preferably from about 1.5 to 5 nm in diameter.

12. (Currently Amended) ~~Use according to any one of the claims, in~~ Catalyst according to Claim 1, which comprises the nanoparticles in suspension in a solvent.

13. (Currently Amended) ~~Use according to~~ Catalyst according to Claim 12, in which the nanoparticle suspension has a nanoparticle concentration of from 0.3 to 1 mg/ml.

14. (Currently Amended) ~~Use according to any one of Claims 1~~ Catalyst according to Claim 1, in which the nanoparticles are in the form of a thin film, deposited onto the surface of a support.

15. (Currently Amended) ~~Use according to~~ Catalyst according to Claim 14, in which the support is a carbon nanotube.

16. (Currently Amended) ~~Use according to any one of the preceding claims,~~ Catalyst according to Claim 1, in which the nanoparticles are subjected to a pretreatment in basic medium.

17. (Currently Amended) ~~Use according to~~ Catalyst according to Claim 16, in which the pretreatment of the nanoparticles consists in immersing them in a solution of a strong base.

18. (Currently Amended) ~~Use according to any one of the preceding claims, in which the nanoparticles are used as electrocatalysts.~~ Catalyst according to Claim 1, which is an electrocatalyst.

19. (Currently Amended) ~~Use according to Claim 18, in which the nanoparticles are~~ Catalyst according to Claim 18, which is used in a device for producing electrical energy.

20. (Currently Amended) ~~Use according to Claim 19, in which the device for producing electrical energy is~~ Catalyst according to Claim 19, which is used in a fuel cell.

21. (Currently Amended) ~~Use according to Claim 18, in which the nanoparticles are~~ Catalyst according to Claim 18, which is used in a system for detecting or assaying one or more chemical or biological species, in particular a sensor or a multisensor.

22. (Currently Amended) Device for producing electrical energy, which comprises nanoparticles as defined ~~in any one of Claims 1 to 11~~ in claim 1.

23. (Original) Device according to Claim 22, which is a fuel cell.

24. (Original) Nanoparticle comprising:

- a metal core containing at least one platinoid or an alloy of a platinoid,
- a first organic coating formed from molecules attached to the surface of the metal core, and
- a second organic coating formed from molecules different from the molecules of the first organic coating, and which are grafted onto molecules of the first organic coating, in

which the molecules of the second organic coating are residues of a compound chosen from monocyclic and polycyclic anhydrides.

25. (Original) Nanoparticle according to Claim 24, in which the molecules forming the second organic coating are residues of a compound chosen from glutaric anhydride, sulfobenzoic anhydride, diphenic anhydride, tetrafluorophthalic anhydride, tetraphenylphthalic anhydride and diphenylmaleic anhydride.

26. (Currently Amended) Nanoparticle according to ~~Claim 24 or Claim 25~~ Claim 24, in which the metal core consists of platinum, a platinum alloy or a mixture of the two.

27. (Currently Amended) Nanoparticle according to ~~any one of Claims 24 to 26~~ Claim 24, in which the molecules of the first organic coating are 4-mercaptoaniline residues.

28. (Currently Amended) Nanoparticle according to ~~any one of Claims 24 to 27~~ Claim 24, which is from about 1.5 to 10 nm in diameter and preferably from about 1.5 to 5 nm in diameter.